In the Claims:

1. (Original) A method for treating a condition characterized by or involving, or that may be relieved in any measure by ameliorating, decreased β-cell mass and/or decreased β-cell number in a subject, comprising administering to said subject an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

2. (Original) The method of claim 1, wherein said preptin is selected from the group consisting of a human preptin comprising the amino acid sequence Asp Val Ser Thr Pro Pro Thr Val Leu Pro Asp Asn Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Lys Gln Ser Thr Gln Arg Leu (SEQ ID NO: 1), a rat preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Lys Phe Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu (SEQ ID NO: 2), and a mouse preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu (SEQ ID NO: 3).

3. (Original) The method of claim 1, wherein the preptin agonist comprises a fragment or the entirety of an amino acid sequence of SEQ ID NO: 1, 2, or 3.

4. (Original) The method of claim 3, wherein the fragment comprises residues 17-34 of SEQ ID NO: 1, 2, or 3.

5. (Original) The method of claim 1, wherein the preptin agonist comprises an amino acid sequence that is at least about 60% identical to SEQ ID NO: 1, 2, or 3.

6. (Original) The method of claim 5, wherein the preptin agonist comprises an amino acid sequence that is at least about 80% identical to SEQ ID NO: 1, 2, or 3.

7. (Original) The method of claim 5, wherein the preptin agonist comprises an amino acid sequence that is at least about 90% identical to SEQ ID NO: 1, 2, or 3.

8. (Original) The method of claim 5, wherein the preptin agonist comprises an amino acid sequence that is at least about 95% identical to SEQ ID NO: 1, 2, or 3.

9. (Original) The method of claim 1, wherein the preptin agonist comprises SEQ ID NO: 1, 2, or 3 with up to about 14 conservative or other amino acid substitutions.

10. (Original) The method of claim 9, wherein the preptin agonist comprises SEQ ID NO: 1, 2, or 3 with up to about 10 to 13 conservative or other amino acid substitutions.

11. (Original) The method of claim 9, wherein the preptin agonist comprises SEQ ID NO: 1, 2, or 3 with up to about 6 to 9 conservative or other amino acid substitutions.

12. (Original) The method of claim 9, wherein the preptin agonist comprises SEQ ID NO: 1, 2, or 3 with up to about 2 to 5 conservative or other amino acid substitutions.

13. (Original) A method for increasing or maintaining β-cell mass and/or β-cell number, comprising administering to a subject in need thereof an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

14. (Original) The method of claim 13, wherein said preptin is selected from the group consisting of a human preptin comprising the amino acid sequence Asp Val Ser Thr Pro Pro Thr Val Leu Pro Asp Asn Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Lys Gln Ser Thr Gln Arg Leu (SEQ ID NO: 1), a rat preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Lys Phe Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu (SEQ ID NO: 2), and a mouse preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu (SEQ ID NO: 3).

15. (Original) The method of claim 13, wherein the preptin agonist comprises a fragment or the entirety of the amino acid sequence of SEQ ID NO: 1, 2, or 3.

16. (Original) The method of claim 15, wherein the fragment comprises residues 17-34 of SEQ ID NO: 1, 2, or 3.

17. (Original) The method of claim 13, wherein the preptin agonist comprises a peptide selected from the group consisting of (1) an amino acid sequence that is at least about 60% identical to SEQ ID NO: 1, 2, or 3, (2) an amino acid sequence that is at least about 80% identical to SEQ ID NO: 1, 2, or 3, (3) an amino acid sequence that is at least about 90% identical to SEQ ID NO: 1, 2, or 3, and (4) an amino acid sequence that is at least 95% identical to SEQ ID NO: 1, 2, or 3.

18. (Original) The method of claim 13, wherein the preptin agonist is selected from the group consisting of a peptide comprising (1) SEQ ID NO: 1, 2, or 3 with up to about 14 conservative or other amino acid substitutions, (2) SEQ ID NO: 1, 2, or 3 with up to about 10 to 13 conservative amino or other acid substitutions, (3) SEQ ID NO: 1, 2, or 3 with up to about 6 to 9 conservative or other amino acid substitutions, (4) SEQ ID NO: 1, 2, or 3 with up to about 2 to 5 conservative or other amino acid substitutions

19. (Original) A method for stimulating growth in β-cell proliferation and/or increased β-cell mass, comprising administering to a subject in need thereof an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

20. (Currently Amended) The method of claim 19, wherein said preptin is selected from the group consisting of a human preptin comprising the amino acid sequence Asp Val Ser Thr Pro Pro Thr Val Leu Pro Asp Asn Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Lys Gln Ser Thr Gln Arg Leu **(SEQ ID NO: 1)**, a rat preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Lys Phe Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu **(SEQ ID NO: 2)**, and a mouse preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu **(SEQ ID NO: 3).**

21. (Original) The method of claim 19, wherein the preptin agonist comprises a fragment or the entirety of an amino acid sequence of SEQ ID NO: 1, 2, or 3.

22. (Original) The method of claim 21, wherein the fragment comprises amino acid residues 17-34 of SEQ ID NO: 1, 2, or 3.

23. (Original) The method of claim 19, wherein the preptin agonist comprises a peptide selected from the group consisting of (1) an amino acid sequence that is at least about 60% identical to SEQ ID NO: 1, 2, or 3, (2) an amino acid sequence that is at least about 80% identical to SEQ ID NO: 1, 2, or 3, (3) an amino acid sequence that is at least about 90% identical to SEQ ID NO: 1, 2, or 3, and (4) an amino acid sequence that is at least 95% identical to SEQ ID NO: 1, 2, or 3.

24. (Original) The method of claim 19, wherein the preptin agonist is selected from the group consisting of a peptide comprising (1) SEQ ID NO: 1, 2, or 3 with up to about 14 conservative or other amino acid substitutions, (2) SEQ ID NO: 1, 2, or 3 with up to about 10 to 13 conservative amino or other acid substitutions, (3) SEQ ID NO: 1, 2, or 3 with up to about 6 to 9 conservative or other amino acid substitutions, (4) SEQ ID NO: 1, 2, or 3 with up to about 2 to 5 conservative or other amino acid substitutions.

25. (Original) A method of treating a mediated disease, disorder of condition mediated in whole or in part by □-cells or □-cell dysfunction in a subject, comprising administering to the subject an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

26. (Currently Amended) The method of claim 25, wherein the said preptin is selected from the group consisting of a human preptin comprising the amino acid sequence Asp Val Ser Thr Pro Pro Thr Val Leu Pro Asp Asn Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Lys Gln Ser Thr Gln Arg Leu **(SEQ ID NO: 1)**, a rat preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Lys Phe Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu **(SEQ ID NO: 2)**,

and a mouse preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu **(SEQ ID NO: 3)**.

27. (Original) The method of claim 25, wherein the preptin agonist comprises a fragment or the entirety of the amino acid sequence of SEQ ID NO: 1, 2, or 3.

28. (Original) The method of claim 25, wherein the disease is type 1 diabetes or type 2 diabetes.

29. (Original) A method of increasing insulin secretion in a subject comprising administering to the subject an effective amount of preptin, a preptin analog, and/or a preptin agonist.

30. (Currently Amended) The method of claim 29, wherein said preptin is selected from the group consisting of a human preptin comprising the amino acid sequence Asp Val Ser Thr Pro Pro Thr Val Leu Pro Asp Asn Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Lys Gln Ser Thr Gln Arg Leu **(SEQ ID NO: 1)**, a rat preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Lys Phe Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu **(SEQ ID NO: 2)**, and a mouse preptin comprising the amino acid sequence Asp Val Ser Thr Ser Gln Ala Val Leu Pro Asp Asp Phe Pro Arg Tyr Pro Val Gly Lys Phe Phe Gln Tyr Asp Thr Trp Arg Gln Ser Ala Gly Arg Leu **(SEQ ID NO: 3)**.

31. (Original) The method of claim 29, wherein the preptin agonist comprises a fragment or the entirety of the amino acid sequence of SEQ ID NO: 1, 2, or 3.

32. (Original) An article of manufacture comprising:

a vessel containing an amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof in an amount effective to treat or ameliorate a disease, condition or disorder, or one more symptoms thereof; and

instructions for use of the contents of the vessel for the treatment or amelioration of a disease, condition or disorder involving an injury, a wound, decreased β-cell mass, decreased β-cell number, or decreased β-cell function, or one more symptoms thereof, comprising administration to a subject.

33. (Original) An article of manufacture comprising:

packaging material; and

contained within the packaging material, one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof, in an amount effective to treat or ameliorate a disease, condition or disorder, or one more symptoms thereof;

wherein the packaging material describes or refers to the use of said one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof, for treating an injury, a wound, or a condition mediated in whole or in part by □-cell loss or □-cell dysfunction in a subject.

34. (Original) The use of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof, in the manufacture of a medicament for the treatment of a subject of any one or more of the following:

i) an internal injury;
ii) an external injury;
iii) an internal wound;
iv) an external wound;
v) a condition characterized in whole or in part by decreased β-cell mass
vi) a condition characterized in whole or in part by decreased β-cell number,
vii) increasing or maintaining β-cell mass;
viii) increasing or maintaining β-cell number,
ix) stimulating β-cell proliferation via cell differentiation or neogenesis,
x) increasing β-cell mass via cell differentiation or neogenesis,
xi) β-cell mediated disease;

xii) a condition characterized in whole or in part by undesirably low insulin secretion; and

xiii) a condition characterized in whole or in part by insulin resistance;

xiv) a condition characterized in whole or in part by hyperglycemia; and,

xv) a condition characterized in whole or in part by postprandial hyperglycemia.

35. (Original) The use of claim 34, wherein said preptin is a human, a rat, or a mouse preptin.

36. (Original) The use of claim 34, wherein the preptin agonist comprises a fragment or the entirety of the amino acid sequence of SEQ ID NO: 1, 2, or 3.

37. (Original) The use of claim 36, wherein the fragment comprises amino acid residues 17-34 of SEQ ID NO: 1, 2, or 3.

38. (Original) The use of claim 34, wherein the preptin agonist comprises a peptide selected from the group consisting of (1) an amino acid sequence that is at least about 60% identical to SEQ ID NO: 1, 2, or 3, (2) an amino acid sequence that is at least about 80% identical to SEQ ID NO: 1, 2, or 3, (3) an amino acid sequence that is at least about 90% identical to SEQ ID NO: 1, 2, or 3, and (4) an amino acid sequence that is at least 95% identical to SEQ ID NO: 1, 2, or 3

39. (Original) The use of claim 34, wherein the preptin agonist is selected from the group consisting of a peptide comprising (1) SEQ ID NO: 1, 2, or 3 with up to about 14 conservative or other amino acid substitutions, (2) SEQ ID NO: 1, 2, or 3 with up to about 10 to 13 conservative amino or other acid substitutions, (3) SEQ ID NO: 1, 2, or 3 with up to about 6 to 9 conservative or other amino acid substitutions, (4) SEQ ID NO: 1, 2, or 3 with up to about 2 to 5 conservative or other amino acid substitutions.

40. (Original) The use claim 34wherein the β-cell mediated disease is either type 1 diabetes or type 2 diabetes.

41. (Original) A dosage unit useful or suitable for use in a method of any one of claims 1 to 40 comprising one or more compounds selected from the group consisting of

preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof, formulated to be administered or self administered with any one or more of a pharmaceutically acceptable surround, a pharmaceutically acceptable carrier, a pharmaceutically acceptable suitable co-active, a pharmaceutically acceptable buffer, a pharmaceutically acceptable salt, a pharmaceutically acceptable tonicity agent, and/or a pharmaceutically acceptable diluent.

42. (Original) The dosage unit of claim 41 wherein the amount of said one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof, is within the range from about 10 to about 40 μg/Kg body weight of a subject to about 200 to about 500 μg/Kg body weight of a subject to about 600 to abut 1000 μg/Kg body weight of a subject.

43. (Original) A method for treating an injury or wound in or on a subject, which comprises applying to said injury or wound a composition comprising an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

44. (Original) The method of claim 43, wherein said subject is a human.

45. (Original) The method of claim 43, wherein said subject is not a human.

46. (Original) The method of any of claims 43, 44, or 45, wherein said wound is one in which the skin or another external surface is torn, pierced, cut, or otherwise broken.

47. (Original) The method of any of claims 43, 44, or 45, wherein said wound is one that penetrates the flesh but does not substantially damage underlying bones or vital organs.

48. (Original) The method of any of claims 43, 44, or 45, wherein said wound is a skin surface injury

49. (Original) The method of any of claims 43, 44, or 45, wherein said wound is internal bleeding.

50. (Original) The method of any of claims 43, 44, or 45, wherein said composition is an ointment, a cream, or a gel.

51. (Original) The method of any of claims 43, 44, or 45, wherein said wound is selected from the group consisting of chemical burns, thermal burns, skin graft donor sites, skin graft transplant sites, cutaneous ulcers, surgical wounds, wound dehiscence, corneal trauma, corneal transplant sites, tooth extraction sites, oral surgery wounds, disruption of a mucous membrane, a disruption of the skin, and a disruption of the connective tissue.

52. (Original) The method of claim 51 wherein said cutaneous ulcer is selected from the group consisting of decubitus ulcers, diabetic ulcers, vascular stasis ulcers, and necrobiosis lipoidicum ulcers.

53. (Original) The method of claim 51 wherein said mucous membrane disruption is selected from the group consisting of a disruption of a mucous membrane within the gastrointestinal tract, and a disruption of a mucous membrane within the bladder.

54. (Original) The method of claim 53 wherein said disruption of a mucous membrane within the gastrointestinal tract comprises ulcerative colitis.

55. (Original) The method of claim 53 wherein said disruption of a mucous membrane within the gastrointestinal tract comprises Crohn's Disease.

56. (Original) The method of claim 51 wherein said disruption of the skin comprises an abrasion.

57. (Original) The method of claim 51 wherein said disruption of the connective tissue comprises an abrasion.

58. (Original) A method for enhancing wound healing, which comprises topically applying to such wound an effective amount of one or more compounds selected from the group consisting of selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

59. (Original) A method for treating a condition in a subject by the application or administration of a compound that promotes the proliferation of mesenchymal-derived cells and/or cell mass, the improvement comprising administering to said subject an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

60. (Original) The method of claim 59, wherein the mesenchymal-derived cells comprise fibroblasts.

61. (Original) Administration of a composition comprising an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof, for the treatment and/or prevention of peripheral nervous system injury, decreasing cell death of motor neurons, increasing muscular end plates, promoting the functional recovery of damaged sciatic nerves, preventing peripheral motor paralysis during or as a result of chemotherapy, treatment and/or prevention of Alzheimer's disease, treatment and/or prevention of apoplexy, treatment and/or prevention of amyotrophic lateral sclerosis, treatment and/or prevention of Parkinson's disease, treatment and/or prevention of muscular dystrophy, treatment and/or prevention of diabetic neuropathy, improvement of myocardial function, treatment and/or prevention of myocardiopathies including myocarditis and myocardial infarction, treatment and/or prevention of cardiac disease and acute attack, and treatment and/or prevention of acute renal insufficiency caused by ischemia.

62. (Original) A method for promoting the growth of tissues in a subject by the application or administration of a compound that promotes such growth, which comprises applying or administering to said subject an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

63. (Original) The method of claim 62 wherein the tissue is selected from the group consisting of connective tissue and epithelial tissue.

64. (Original) A method for improving the immune function in a subject by the application or administration of a compound to improve immune function, which comprises applying or administering to said subject an effective amount of one or more compounds selected from the group consisting of preptins, preptin analogs, preptin agonists, salts thereof, and derivatives thereof.

65. (Original) The method of claim 64 wherein the improvement of said immune function comprises an improvement in lymphocyte proliferation.